Regulatory File Cy.

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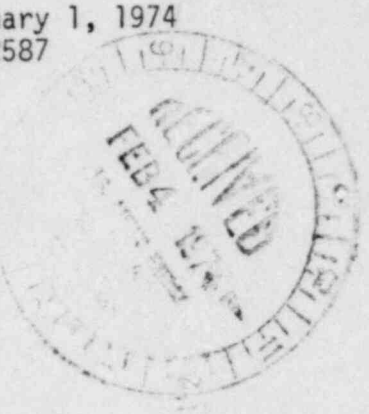
CONNECTICUT YANKEE ATOMIC POWER COMPANY
HADDAM NECK PLANT
RR #1, BOX 127E, EAST HAMPTON, CONN. 06424

February 1, 1974
CYH-2587

50-213



Mr. A. Giambusso
Deputy Director for Reactor Projects
Directorate of Licensing
Office of Regulation
United States Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Giambusso,

As defined by Technical Specifications for Connecticut Yankee Atomic Power Station, Section 5.3, the following information involving a total loss of station service power and failure of the service water pumps associated with "A" Emergency Diesel Generator to automatically start is reported as Abnormal Occurrence 74-3.

Station service power for the Connecticut Yankee plant is supplied over two transmission lines which tie the Connecticut Light and Power Company system at the Montville generating station and Haddam substation (line 1206) with the Hartford Electric Light Company system at the Middletown generating station (line 772). During a severe ice storm on January 19, 1974, a momentary fault on the 772 transmission line caused an inadvertent trip of the 1206 transmission line, resulting in a total loss of station service power. All systems responded normally to shut the plant down to the hot standby condition. Both emergency diesel generators started and energized the respective emergency busses as required, however the service water pumps associated with the A Emergency Diesel Generator did not start automatically as required. The service water pump associated with the B emergency diesel generator started as required and is adequate for all emergency needs, however the service water pump associated with the A emergency diesel was subsequently started manually. The auto-start capability of the service water pumps associated with the A Emergency Diesel Generator was subsequently demonstrated several times.

The Middletown/Connecticut Yankee transmission line outage was traced to a faulted lightening arrestor on the Pratt and Whitney Aircraft-Middletown (1572) transmission line. Inadvertent tripping of the Montville/Haddam 1206 transmission line was apparently caused by incorrect blocking relay action, however the exact cause is still under investigation.

The emergency generating system is equipped with undervoltage devices which strip and lock out all unnecessary 480 volt loads to allow diesel generator starting without load. Each 480 volt bus has two Westinghouse

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type CV undervoltage relay circuits which trip and block auto closure of several components. Redundant tripping capability is provided by undervoltage devices installed on the air circuit breakers of individual 480 volt components. Both undervoltage devices are equipped with time delay features to allow for 115 KV line reclosure or transfer of supplies. It appears that the undervoltage device on the service water pump breaker actuated before the 480 volt bus undervoltage device, blocking the auto-start capability of 1A service water pump. The time delay features of both undervoltage devices were readjusted such that the Westinghouse CV type relay will always actuate before the undervoltage device on the service water pump breaker. An investigation is being conducted to determine the necessity and desirability of removing the redundant undervoltage tripping device.

With readjustment of the time delay settings on the undervoltage devices, it is not expected that this situation will reoccur.

Very truly yours,

F. W. Hartley
Plant Superintendent

RHG/jwa

cc: Mr. James P. O'Reilly, Director
Region 1
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
King of Prussia, Pennsylvania 19406